

REMARKS

STATUS OF THE CLAIMS

Applicant has amended Claims 15 and 18. Applicant has added new dependent Claims 48-51. Applicant respectfully requests consideration of pending Claims 15-24 and 48-51 in light of the following remarks.

CLAIM REJECTIONS – 35 U.S.C. § 102(b)

Independent Claim 15

Claim 15 stands rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,407,571 issued to Rothwell (“Rothwell”). Amended Claim 15 specifies “the first orientation and the second orientation each allowing both parallel flow and series flow with the second head.”

Rothwell discloses a modular filter assembly that can include multiple filter units, each having a head 1, a filter element 4, and a filter housing 6. As shown in Figures 1 and 2, the head 1 includes a feed chamber 2 with an inlet opening 21 and an outlet opening 22, along with a discharge chamber 3 with an inlet opening 31 and an outlet opening 32. As shown in Figure 2, the feed chamber 2 and the discharge chamber 3 are in fluid communication with opposite sides of the filter element 4. Figure 4 of Rothwell illustrates three filter units A, B, C which are configured for parallel flow with one another. Each of the three filter units A, B, C is positioned in the same orientation. The flow path, as shown by the arrows in Figure 4, allows fluid to travel from the feed chamber 2 of the first unit A either to the feed chamber 2 of the second unit B or through the filter element 4 of the first unit A and into the discharge chamber 3 of the first unit A. The second unit B is connected in the same manner to the third unit C. In this configuration, all of the feed chambers 2 of the three filter units A, B, C are coupled together, as are all of the discharge chambers 3 of the three filter units A, B, C.

However, the fourth filter unit D shown in Figure 4 of Rothwell is rotated 180 degrees from the orientation of the first three filter units A, B, C. The third filter unit C is connected for series flow with the fourth filter unit D. As shown in Figure 4, a blank 50 is positioned between

the third filter unit C and the fourth filter unit D to block the outlet 22 of the feed chamber 2 of the third filter unit C, while allowing flow to exit the discharge chamber 3 of the third filter unit C so that it may pass into the fourth filter unit D. A fifth filter unit E is downstream of the fourth filter unit D and is also connected to the fourth filter unit D for series flow. However, in order to couple the fourth filter unit D and the fifth filter unit E for series flow, the fifth filter unit E must be rotated 180 degrees from the orientation of the fourth filter unit D to the same position as the first three filter units A, B, C. As shown in Figure 4, another blank 50 is positioned between the fourth filter unit D and the fifth filter unit E to prevent flow from exiting the fourth filter unit D through the outlet opening 32" of the feed chamber 2. Accordingly, Rothwell discloses changing between parallel flow and series flow by changing the physical orientation of two adjacent filter units. Each 180 degree orientation is exclusive to one flow configuration, i.e., one 180 degree orientation produces a parallel flow configuration between two adjacent filter units and the other 180 degree orientation produces a series flow configuration between two adjacent filter units.

Rothwell also discloses a second type of filter unit orientation. Figures 7-10 of Rothwell illustrate a configuration where the feed chambers F and the discharge chambers D of each filter unit are repositioned to the top side of the filter head 1. The filter heads 1 are then connected with their top sides facing each other and coupled together so that the filter units (a_1 , b_1 , a_2 , b_2 , etc., as shown in Figure 8) extend in opposite directions from one another. Figures 9 and 10 illustrate the orientation of the feed chambers F and the discharge chambers D of the filter heads 1 for parallel flow and series flow, respectively. More specifically, Rothwell discloses one 90 degree orientation for parallel flow (as shown in Figure 9) and another 90 degree orientation for series flow (as shown in Figure 10). In other words, the filter units 1 must be rotated 90 degrees to change from parallel flow to series flow or vice versa. While different from the orientation illustrated in Figure 4, Rothwell still only discloses changing the flow configuration by changing the physical orientation of the filter units.

Accordingly, Rothwell does not disclose "the first orientation and the second orientation each allowing both parallel flow and series flow with the second head," as specified by amended Claim 15. Therefore, independent Claim 15 and dependent claims 16-24 and 48-51 are allowable.

Dependent Claims 16-24

Claims 16-24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Rothwell. Claims 16-24 depend from Claim 15 and are therefore allowable for the reasons set forth above with respect to Claim 15. Claims 16-24 also specify additional patentable subject matter.

CONCLUSION

In light of the above, Applicant respectfully requests reconsideration and allowance of Claims 15-24 and 48-51.

Respectfully submitted,

A handwritten signature in black ink, reading "Raye L. Daugherty". The signature is written in a cursive, flowing style.

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Docket No. 085455-9510-00
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